

Patent Claims:

1. Hydraulic unit, in particular for slip-controlled brake systems,
including an accommodating member accommodating inlet and outlet valves in several valve accommodating bores of a first and second valve row, said valves opening into a first housing surface of the accommodating member that is disposed at right angles between a second and third housing surface,
including a pump accommodating bore arranged in the accommodating member and pointing transversely to the direction the valve accommodating bores open into the accommodating member,
including a motor accommodating bore arranged in the accommodating member for driving a pump inserted into the pump accommodating bore, to what end the motor accommodating bore is aligned transversely to the pump accommodating bore,
including at least one accumulator accommodating bore opening into the accommodating member into the second housing surface,
including several pressure fluid channels that connect the valve-, pump- and accumulator accommodating bores and are adapted to provide a hydraulic connection between a pressure fluid generator and at least one pressure fluid receiver,
as well as including a ventilation system that permits ventilating and venting the pump- and accumulator accommodating bore for pressure compensation exclusively by way of one single ventilation point that is in

connection to a pressure compensating channel of the ventilation system,

characterized in that the pressure-compensating channel (1) extends transversely to the motor- and pump accommodating bore (2, 11) from the second housing surface (A2) through the motor accommodating bore (2) in the direction of the third housing surface (A3) in the accommodating member (3) positioned diametrically to the second housing surface (A2).

2. Hydraulic unit as claimed in claim 1,

characterized in that a first pressure compensating channel portion (1a) extends between the motor accommodating bore (2) and a cover (5) closing the accumulator accommodating bore (4) and being attached to the second housing surface (A2), preferably in an operative engagement or a molecular bond.

3. Hydraulic unit as claimed in claim 1 or 2,

characterized in that two parallel arranged accumulator accommodating bores (4) open into the second housing surface (A2) at a radial distance from each other in which the first pressure compensating channel portion (1a) extends from the motor accommodating bore (2) up to the cover (5) that closes the two accumulator accommodating bores (4).

4. Hydraulic unit as claimed in any one of the preceding claims 2 to 3,

characterized in that the discharge of pump leakage from the motor accommodating bore (2) to the accumulator accommodating bore (4) is carried out through the first pressure compensating channel portion (1a) into

a chamber (4a) associated with the accumulator accommodating bore (4), and the absorptive volume of said chamber (4a) is variable by way of the design of the cover (5).

5. Hydraulic unit as claimed in claim 4, characterized in that the cover (5) has a bowl-shaped design and includes a projecting length (Z) to increase the volume of leakage absorption at the second housing surface (A2).
6. Hydraulic unit as claimed in claim 2, characterized in that the cover (5) is made by non-cutting metal shaping, preferably in deepdrawing, stamping or extruding operations.
7. Hydraulic unit as claimed in claim 2, characterized in that the cover (5) is made by deepdrawing plastic material.
8. Hydraulic unit as claimed in claim 1, characterized in that a second pressure compensating channel portion (1b) extends between the motor accommodating bore (2) and the ventilation point (6), which is fitted at the end of the second pressure compensating channel portion (1b) either directly in the accommodating member (3) or in a hood (7) that is sealedly seated onto the first housing surface (A1) of the accommodating member (3).
9. Hydraulic unit as claimed in claim 8, characterized in that the hood (7) covers several inlet and outlet valves inserted into the valve

accommodating bores (8) and connected to electric controlling and/or regulating elements that are arranged in hood (7).

10. Hydraulic unit as claimed in claim 1,
characterized in that the pressure compensating channel (1) is configured as an angular channel formed of a first and a second blind-end bore, with the second blind-end bore comprised of the two pressure compensating channel portions (1a, 1b) opening into the second housing surface (A2) and being led transversely through the motor accommodating bore (2) up to the ventilation point (6), and wherein the first blind-end bore opens into the first housing surface (A1) and intersects with its end the end of the second blind-end bore.
11. Hydraulic unit as claimed in claim 10,
characterized in that the second pressure compensating channel portion (1b) traverses a cable duct (9) which is positioned in parallel to the valve accommodating bores 8 and arranged beside the motor accommodating bore (2) and connects an electric motor inserted into the motor accommodating bore (2) to electric controlling and/or regulating elements that are arranged beside the first housing surface (A1).
12. Hydraulic unit as claimed in claim 1,
characterized in that the ventilation point (6) includes an element (10) that is permeable to gas, yet impermeable to fluid, and is preferably composed of a semi-permeable membrane.